

Sent by:

714 660 1801;

01/29/98 2:08PM; Jetfax #708, Page 8/24

951028(US)USC1X1X1D1 MMMI
Serial No. 08/485,070

PATENT

5,677,899. Concurrent with the filing of the present application, a preliminary amendment canceled claims 2-16 leaving claim 1 which Examiner has allowed. The prior application 08/420,899, issued with substantially the same claim 1 as the present application. A copy of the issued claims are attached as exhibit A. Applicant believes that since these claims are substantially the same, double patenting may be an issue. Therefore, Applicant earnestly requests that Examiner withdraw the allowance of claim 1, reopen the prosecution, and allow entry of Applicant's amendment contained herein.

In the Specification:

Applicant wishes to amend the above-identified application. The number and nature of the amendments are such that Applicant believes a substitute specification is appropriate and necessary. The attached Substitute Specification would substantially facilitate examination and processing of this application. Applicant, therefore, urges the Examiner to enter the attached Substitute Specification pursuant to 37 C.F.R. §1.125 so that prosecution of this application may proceed in an efficient manner.

In the Title:

Please delete the title in toto and in place thereof insert:

-APPARATUS FOR MOVING A CARRIAGE ASSEMBLY FROM AN
INITIAL POSITION TO A TARGET POSITION-

In the Abstract:

Please delete the abstract in toto and in place thereof insert:

-An apparatus for moving a carriage assembly from an initial position to a target position relative to a storage medium rotating at a circumferential velocity. The apparatus includes a suspended body having a center of mass

Sent by:

714 660 1801;

01/29/98 2:08PM; JetFax #708; Page 0/24

951028(US)USC1X1X1D1 MMMI
Serial No. 08/485,070

PATENT

and a lens defining an optical axis. The center of mass being disposed substantially on the optical axis. The carriage assembly suspends the suspended body and has a center of mass on the optical axis proximate the center of mass of the suspended body. A drive producing a plurality of balanced and symmetrical forces moves the carriage assembly from the initial position to the target position. A processor determines a velocity trajectory relative to the radial distance of the initial position and the target position to the center of the medium, the circumferential distance between the initial position and the target position, and the initial circumferential velocity of the medium. The processor directs the drive to move the carriage assembly using the velocity trajectory so that the carriage assembly will arrive radially and circumferentially at the target position at substantially the same time and the moments produced by the forces are effectively absent. Additionally, the rotation of the storage medium may be changed from the initial circumferential velocity to a target circumferential velocity, and the velocity trajectory is further related to the target circumferential velocity.—.

In accordance with Office policy under M.P.E.P. Sec. 608.01(b), Applicant submits herewith as a part of the submitted Substitute Specification, a separate sheet with the subject Abstract as currently rewritten.

In the Drawing Figures:

Please cancel original Fig. 77. For purposes of clear identification, Applicant submits herewith a copy of Original Fig. 77 with the informal legend "Canceled" placed thereon.

Applicant has amended Figs. 1, 2, 4B, 5, 6, 7, 8A, 8B, 9, 10D, 10F, 12A-12D, 13A, 13B, 13C, 14A, 14B, 15B, 16A, 20, 21, 23-25, 27, 28, 33, 36, 43, 49B, 51B, 54, 59A, 60A, 61A, 61B, 62B, 62C, 63, 71, 78, 79, 79B, 80G, 81, 82, 83, 84, 86 (to the extent the "7-" prefix numbers were not readable), 88, 89, 91,

PATENT

951028(US)USC1X1X1D1 MMMI
Serial No. 08/485,070

98, and 99. These amendments are submitted herewith and identified by highlighting on the corresponding informal drawings as originally filed.

In addition, original Figs. 101-119, the electrical schematics, have been subdivided and arranged on consecutive sheets as Figs. 101A-G, 102A-E, 103A-D, 104A-B, 105A-B, 106A-I, 107A-C, 108A(1)-B, 109A-D, 110A-D, 111A-B, 112A-B, 113, 114A-B, 115A-C, 116A-B, 117A-E, 118A(1)-C, and 119A-C. This relabeling of original Figs. 101-119 has been proposed by Applicant so that the illustrated circuits appearing as separate circuit clusters, each have a corresponding figure legend in accordance with Patent Office drawing regulations and to comply with minimum spacing and character height requirements. These amendments appear as highlighted on the informal Figs. 101-119 as originally filed.

For convenience of examination, and in the interests of proceeding with prosecution of this case in an efficient manner, Applicant submits herewith a set of formal drawing figures, in duplicate, which have incorporated therein the above-indicated amendments.

In the Claims:

Please cancel claim 1.

Please add claims 17-

- 1 17. An apparatus for moving a carriage assembly from an initial position
- 2 to a target position relative to a storage medium having a center and a
- 3 circumference and rotating relative to said carriage assembly at a circumfer-
- 4 ential velocity about said center, said apparatus comprising:
- 5 a suspended body having a center of mass and a lens defining an optical
- 6 axis, said center of mass being disposed substantially on said optical axis, said
- 7 carriage assembly suspending said suspended body at a first position relative
- 8 to said carriage assembly for relative motion thereto with at least one degree